



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,868	11/12/2003	Siegfried Blumel	903-016 (TG168 US)	6745
24295	7590	07/19/2005	EXAMINER	
Rodney T. Hodgson, Ph.D. 822 Pines Bridge Rd. Ossining, NY 10562			PAHNG, JASON Y	
			ART UNIT	PAPER NUMBER
			3725	
DATE MAILED: 07/19/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.	10/706,868	Applicant(s)
Examiner	Art Unit Jason Y. Pahng	3725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

1) Responsive to communication(s) filed on 23 June 2005.  
2a) This action is FINAL.                    2b) This action is non-final.  
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

4) Claim(s) 1-21 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) Claim(s) \_\_\_\_\_ is/are allowed.  
6) Claim(s) 1-21 is/are rejected.  
7) Claim(s) \_\_\_\_\_ is/are objected to.  
8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

9) The specification is objected to by the Examiner.  
10) The drawing(s) filed on 23 November 2003 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All    b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

1) Notice of References Cited (PTO-892)  
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) Notice of Informal Patent Application (PTO-152)  
6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Priority***

In view of Applicant's response, the objection to Applicant's claim for foreign priority made in the last Office action is withdrawn.

### ***Specification***

The amendment overcomes the objections to the specification made in the last Office action.

### ***Claim Objections***

The amendment overcomes the claim objections made in the last Office action.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, as set forth in the last Office action and repeated below.

It appears that claim 2 does not add any additional limitations over claim 1.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 5-8, 10-15, 17, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Goto (US 6,196,482), as set forth in the last Office action and repeated below.

With regard to claim 1, Goto discloses a jet mill including:

1. an inner casing (7, 9, 10, 11) having abrasion resistant inner surfaces;
2. the inner casing (7, 9, 10, 11) having an inlet (13) and an outlet (14);
3. the inner casing (7, 9, 10, 11) having an inlet (3) for introducing a propellant fluid; and
4. a pressurized fluid filled volume contained between an inner surface (of part 6 near the nozzles 3) of the outer casing (part 6 and top and bottom part covering parts 9 and 10) and the outer surface (of the nozzles 3) of the inner casing (7, 9, 10, 11).

With regard to claim 2, Goto discloses an outer casing (part 6 and top and bottom part covering parts 9 and 10).

With regard to claims 5, 11, and 19, Goto discloses an inner casing comprising four parts (7, 9, 10, 11).

With regard to claims 6, 7, 12, and 13, Goto discloses an inner casing made of either a single abrasion-resistant material or from different abrasion-resistant materials (column 6, lines 16-21). According to the claims, the invention would perform equally well with an inner casing made of either a single abrasion-resistant material or from different abrasion-resistant materials.

With regard to claims 8 and 17, Goto discloses a smooth abrasion resistant inner surface (Figure 1).

With regard to claim 10, Goto discloses hard metals for the inner surfaces (column 6, lines 16-21).

With regard to claims 14 and 15, Goto discloses air and nitrogen as the propellant fluid (column 6, lines 22-24).

Claims 1, 2, 8, 16, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Coombe (US 4,502,641), as set forth in the last Office action and repeated below.

With regard to claim 1, Coombe discloses a jet mill including:

1. an inner casing (4) having abrasion resistant inner surfaces;
2. the inner casing (4) having an inlet (19) and an outlet (6);
3. the inner casing (4) having an inlet (3) for introducing a propellant fluid; and
4. a pressurized fluid filled volume contained between an inner surface of the outer casing (2) and the outer surface of the inner casing (4).

With regard to claim 2, Coombes discloses an outer casing (2).

With regard to claims 8 and 17, Coombes discloses a smooth abrasion resistant inner surface (Figures 1 and 2).

With regard to claim 16, Coombe discloses a steam (column 3, lines 51-53).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goto (US 6,196,482) in view of Andrews (US 4,248,387), as set forth in the last Office action and repeated below. Goto discloses substantially all of the claimed structure with the exception of a clamp and a vent. In a closely related art, Andrews discloses a jet mill with a clamp (22) and a vent (62) in order to compress grinding chamber and allow pressure relief. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide Goto with a clamp and a vent in order to compress grinding chamber and allow pressure relief, as taught by Andrews.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goto (US 6,196,482) in view of Andrews (US 4,248,387) as applied above, further in view of Hahn et al. (US 6,726,133), as set forth in the last Office action and repeated below. Claim 4 calls for an equalizing film for sealing. In a closely related art pertinent to the problem, Hahn discloses an RD mill with a gasket in order to seal a compressed area (column 6,

lines 45-49). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide Goto (as modified by Andrews) with a gasket in order to seal a compressed area, as taught by Hahn.

Claims 9 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goto (US 6,196,482) in view of Beliavsky (US 5,855,326), as set forth in the last Office action and repeated below. Claims 9 and 18 call for the abrasion-resistant inner surface to be textured. In a closely related art, Beliavsky discloses a jet mill with a textured inner surface in order to provide different grinding conditions (column 4, lines 40-50). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide Goto with a textured inner surface in order to provide different grinding conditions, as taught by Beliavsky. Additionally, page 7 of the specification discloses that the interior of the pulverizing casing can be of any design.

### ***Response to Arguments***

Applicant's arguments filed on June 23, 2005 have been fully considered but they are not persuasive.

With regard to the Goto reference, Applicant argues that there is no space between the outer casing and the inner casing. However, Goto discloses a pressurized fluid filled volume contained between an inner surface (of part 6 near the nozzles 3) of the outer casing (part 6 and top and bottom part covering parts 9 and 10) and the outer surface (of the nozzles 3) of the inner casing (7, 9, 10, 11), as set forth above in the claim rejections.

With regard to the Coombe reference, Applicant argues that the circular tube 2 is not a casing. However, Coombe's circular tube (2) is, in fact, a casing. The tube (2) has a tubular casing. Furthermore, there are at least three pressurized fluid filled volumes near inlet (3) contained between an inner surface of the outer casing (2) and the outer surface of the inner casing (4).

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Y. Pahng whose telephone number is 571 272 4522. The examiner can normally be reached on 9:00 AM - 7:00 PM, Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on 571 272 4419. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JYP



DERRIS H. BANKS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700